

Claims

[c1] A mullion assembly for a refrigerator quick chill pan, said mullion assembly comprising
a base comprising a top surface and a bottom surface;
a first light element coupled to said base for producing light above said top surface; and
a second light element coupled to said base for producing light below said bottom surface.

[c2] A mullion assembly in accordance with Claim 1 wherein said first light element is oriented at an oblique angle with respect to said top surface.

[c3] A mullion assembly in accordance with Claim 1 further comprising a light element holder for coupling said second light element to said base, said light holder comprising an outer surface and a projection extending therefrom, said projection lockably engaging said holder to said base.

[c4] A mullion assembly in accordance with Claim 3, said base bottom surface comprising a latch projection extending therefrom, said lock projection engaging said light holder projection to lock said holder to said base.

[c5] A mullion assembly in accordance with Claim 1 further comprising a control panel switch assembly coupled to said base top surface, and a control board coupled to said base bottom surface.

[c6] A refrigerator pan assembly comprising:
a pan; and
an insulated mullion assembly overlying said pan, said mullion assembly comprising a top surface, at least one light source extending through said top surface for illuminating said pan from above, and a switch assembly mounted to said top surface for user selection of a pan condition.

[c7] A refrigerator pan assembly in accordance with Claim 6 further comprising a light holder for coupling said at least one light source to said top surface, said light holder selectively positionable between a locked position and an unlocked position.

[c8] A pan assembly in accordance with Claim 7 wherein said light holder comprises a cylindrical outer surface and a projection projecting therefrom.

[c9] A pan assembly in accordance with Claim 8 wherein said mullion assembly comprises a bottom surface extending opposite said top surface, and an opening extending through said top surface and said bottom surface for receiving said light, said opening comprising an outer perimeter and slot for receiving said projection.

[c10] A pan assembly in accordance with Claim 9 wherein said mullion bottom surface comprises a retaining latch member for engaging said projection.

[c11] A pan assembly in accordance with Claim 6 wherein said mullion assembly further comprises a base comprising a bottom surface extending opposite said top surface, and a control board mounted to said bottom surface in communication with said switch assembly.

[c12] A refrigerator comprising:
a liner comprising a refrigeration compartment; and
a mullion assembly mounted within said refrigeration compartment in a substantially horizontal position, said mullion assembly comprising a base, a first light source coupled to said base for producing light above said base and a second light source coupled to said base for producing light below said base.

[c13] A refrigerator in accordance with Claim 12, said base comprising a substantially flat top surface, said second light oriented at an oblique angle with respect to said top surface.

[c14] A refrigerator in accordance with Claim 12, said base comprising a substantially flat top surface and a control panel thereon.

[c15] A refrigerator in accordance with Claim 14, said control panel comprising a membrane switch assembly.

[c16] A refrigerator in accordance with Claim 14, said base comprising a bottom surface extending opposite said top surface, and a control board coupled to said bottom surface and in communication with said control panel.

[c17] A refrigerator in accordance with Claim 12 further comprising a light holder coupling said second light source to said base, said light holder rotatable between a locked position and release position.

[c18] A refrigerator in accordance with Claim 17, said light holder comprising a cylindrical body and a rim extending radially therefrom, said cylindrical body comprising a projection extending therefrom in a spaced relationship to said rim.

[c19] A refrigerator quick chill and thaw system comprising:
a pan;
a mullion situated substantially horizontally above said pan;
a light coupled to said base for illuminating said pan;
a control panel coupled to said base for user selection of a pan condition; and
a control board coupled to said base and operatively coupled to said control panel.

[c20] A refrigerator quick chill and thaw system in accordance with Claim 19, said mullion comprising a base portion, a bottom cover, and an insulating medium therebetween.

[c21] A quick chill and thaw system for a refrigerator including at least a quick chill and thaw fan, an air supply in communication with the fan, and a heater element in communication with the fan, said system comprising:
a pan in fluid communication with the fan, the air supply, and the heater element;
a mullion base situated substantially horizontally above said pan;
a light coupled to said base for illuminating said pan;
a control panel coupled to said base for user selection of a pan condition; and
a control board coupled to said base and operatively coupled to said control panel, said control board regulating the fan, air supply, and heater element in accordance with a selected one of a plurality of modes of operation, said plurality of modes comprising at least a quick chill mode and a thaw mode.

[c22] A refrigerator comprising:

at least one refrigeration compartment;
a pan located within said at least one compartment and operable in a plurality of modes thermally independent of said refrigeration compartment; and
an insulated mullion assembly overlying said pan and thermally isolating said pan from said fresh food compartment.